

From: Wayne Hedberg
To: mglasson@andalex.com
Date: 3/16/2005 10:01:55 AM
Subject: Gob Vent Hole Project - Task# 2161

Mike,

Thanks for sending me the email yesterday that had been forwarded to Pete. Jerriann had already been copied with same.

As we discussed yesterday on the phone, I am forwarding a **draft** list of application deficiencies identified by our tech staff as a result of a preliminary review of your application. I agreed to forward this list to you to assist you in assembling supplemental information to complete your application. Please contact me or any of the tech staff if you have questions or concerns. I will be out of the office this afternoon and all day tomorrow (staying @ Holiday Inn tonight - Price). Back in office on Friday. Wayne Western is the co-lead on this project.

Thanks,
Wayne

CC: Jerriann Ernsten; Jim Smith; Mark Mesch; Pete Hess; Priscilla Burton; Susan White; Wayne Western

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TECHNICAL MEMO

Environmental Resource Issues

1. The Permittee has not conducted a vegetation analysis of the sites or reference areas. The problems that tag along with this are:
 - (a) No baseline evaluation prior to disturbance, therefore we cannot predict the potential for reestablishing vegetation.
 - (b) Must provide cover, diversity, shrub density, and similarity values. Methods and maps of the surveyed area must be included in the reports. Must follow DOGM's veg guidelines. Must provide map with specific reference area locations. Provide map showing springs or streams within or adjacent to the sites (or discuss if not applicable).
 - (c) No reference area. What if the area near this site is mostly disturbed and they can't locate an undisturbed site? Or, are there other concerns like proximity of reference area to high disturbance paths e.g., roads that would require fencing or other protective measures?
 - (d) No productivity values or evaluations of condition provided by NRCS.
2. Is the area deer or elk habitat. If it is wintering or calving habitat, then exclusionary periods will be applied during construction and reclamation.
3. The Permittee has not provided a current TES list (federal [USFWS BLM] and state listed). The statement of "no known...." must be referenced.
 - (a) No idea of whether there are TES plants or suitable habitat within the disturbance area.
 - (b) No idea of whether there are TES animals or suitable habitat to consider. We will communicate with Utah Heritage program to see if there are any known occurrences of TES species.
 - (c) The Permittee needs to GROUND TRUTH for MSO. I think that the area is close enough to known birds. Make sure the Permittee clearly understands what ground truthing means so they can convey what is needed to their contractor. We do not want unnecessary calling surveys!!!
 - (d) The values for the Colorado recovery fish program only includes the project. They need to provide the values for the entire mine operations.
4. Raptor survey: Locations are confidential so submit following DOGM's guidelines.
 - (a) They need to describe whether there are raptor nests within or adjacent to any of the gob hole sites.
 - (b) Depending on the TES list, there may be concern for Northern saw-whet owl or other state sensitive spp. NSO are tree nesting spp, therefore an overflight survey is not useful for determining occurrences of these birds. A survey may be necessary if DWR shows this spp within the areas of consideration.
 - (c) Must consider exclusionary periods if nests are within 0.5 miles of disturbance sites. Periods will be applied during construction and reclamation.

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5. We need the sites evaluated for historic properties.

- (a) The Permittee will want to make sure they understand the type of survey (Class I – III) the contractor recommends and whether that type is necessary for the project. I.e., if the area has been surveyed previously and includes the project sites, then a repeat of a Class III survey may not be necessary and only a Class I (literature review) survey is needed.
- (b) Survey reports must include maps of sites surveyed. Also, narrative that describe historic resources within and adjacent to the project and adjacent area that are included in or eligible for inclusion in the National Register. If there are historic resources, then must include protection measures.

The BLM required a geologist on site during the earth moving for the Pace portal project to monitor for paleontological remains. These site may be very similar in geological formations as the nearby Pace project. The Permittee may want to include this caveat

Operational Issues

Provide information on access route: location, miles of disturbance, installation of culverts and fill.

Provide sediment control for entire length of road disturbance during operation and seed road disturbance immediately after vent becomes operational.

Monitor roadways for vegetation establishment and sediment control and treat as necessary to maintain sediment control.

Since no advance information is available, a commitment to salvage 18 inches of soil at all sites would negate the need for a soil scientist being present during drilling and at the same time balance the need to minimize disturbance while salvaging and storing topsoil.

Use of track equipment (rather than rubber tired) is necessary for roadwork and for topsoil salvage and replacement.

Stockpiled topsoil must not remain at the angle of repose (1h:1v) for longer than 2 weeks.

The slope of the topsoil stockpiles must be reduced during contemporaneous reclamation (or after two weeks) to less than 2h:1v.

Stockpiled soil remaining after contemporaneous reclamation must be immediately seeded.

Provide protection and enhancement measures during construction and reclamation phases. Must explain and provide specifics for section 331-333.

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Must provide the Division with seed mix that will be used and how the areas will be reseeded.

The Permittee must state the following:

- The route they will use to access the sites, starting from a paved public road.
- The types of roadwork needed to allow heavy equipment to travel to and from the site.
- How they will be able to locate the roads given the snow cover.

The Permittee must include supply the Division with reclamation cost estimates to reclaim the access roads and drill pads.

As Built Requirements:

Conduct a soil investigation (survey) of the area to define the previous condition of the site.

Provide information on access route: location, miles of disturbance, installation of culverts and fill.

Monitor roadways for vegetation establishment and sediment control and treat as necessary to maintain sediment control.